

ARCHITECTURE DEPARTMENT

CHINESE UNIVERSITY OF HONG KONG

MASTER OF ARCHITECTURE PROGRAMME

2004-2005

DESIGN REPORT



CHILDREN : LEARNING : JOY

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December 2004

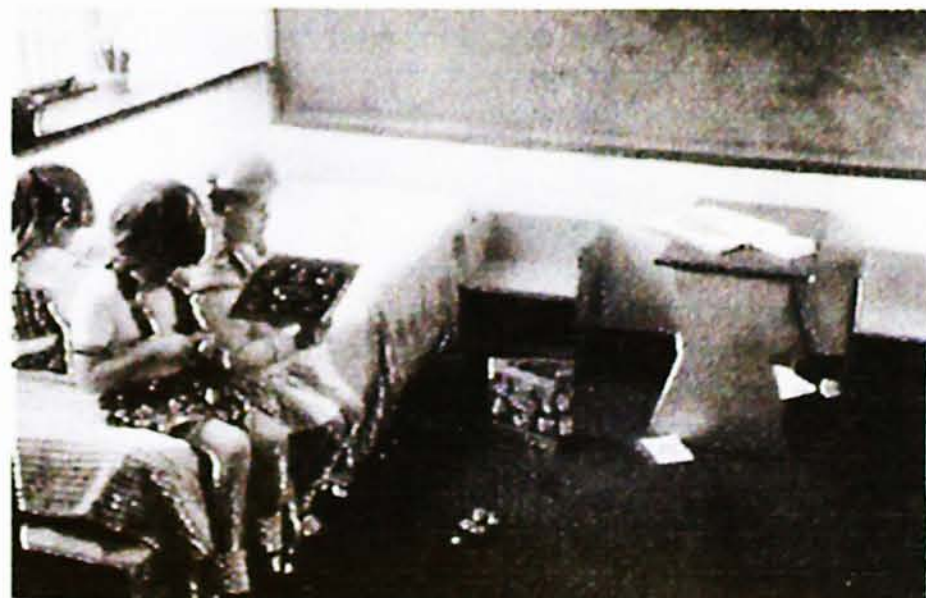


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Children have innocent soul that they should grow in a well-prepared environment. Children formularize their first experience of the world through recognition of space. Architecture plays an important role in child's perception and it formularizes an essential part of child's education. To recognize the complexity of architecture for children and point out what children really want and need and how the architecture can achieve this is the aim to design the place for the child. Education is part of children's growth and the aim of this study is to discuss the learning place for children.

Pre-school education could not be separate from the architecture as the school is the main places where children experience and achieve the education. In this sense architecture for children learning follows the change of the educational system.



The architecture responds and interacts with the change in educational system and its direction. If the educational direction has change, architecture should be shift to achieve of this alteration. The question is what is a good education system for children and how must it be defined. How architecture could benefit education? What is a real place for children to learn and joy and what is a real place for teacher to teach?



For some psychologists the essences of childhood are playfulness and exploration, but these must be taken place in a secure setting and it should be ensure they can learn and developed. Children in formal education are not expected to be playful, self-directed and exploration where instructional methods is dominated and children are viewed more passive recipients of knowledge than as active constructor of their own learning. In children education, young children are granted a freedom of being and expression elsewhere in every educational system. *Margaret McMillan*, one of the pioneers of children education in the UK, suggest that young children, particularly those from the slums where she worked could be provided some outside space above all to liberate them from their cramped depressing environment. They could learn from movement and play freely, engage in individual or group play activities, and learn to appreciate the beauty of nature otherwise denied to them. Another view from her is that children who grow in the chaotic, industrial cities are emotionally fragile, physically impoverished and badly needed a compensatory environment, was widely shared. So it is important that to balance the time between teaches them formally or let them to learn through adventure themselves. The combinative method such as formal education, learning form a nature environment, playful self-direction and exploration are the direction for the children education. Moreover, adults can express themselves easily by writing and speaking, but children do not have skills to express themselves clearly. They need to explore and test many times of self-expression, such as physical, emotional and aesthetic. Children learn to interpret and draw the meaning out from the people, places and everything around them. It is more easily to learn though the experience and sensations themselves than trying to make sense of words and emotional currents. A Swiss child psychologist *Jean Piaget* mention that children learn best from activities which they plan and carry out themselves. So the activities areas are the most important part of the school. Sand and water play; physical play; construction and manipulation; and creative representation; quiet space for the resting, reading and the storytelling. Both of the activities could be a chance to let the childhood to learn themselves. This system that expects the

children to make their own decisions and plan how they intend to spend their days and it is quite successful to run in modern countries in these

recent years.

Definitely, the formal education is one of the important parts of the educational system, but the most active, directive and variety methods which concern about the feeling, emotion, psychical and psychological of children is becoming more important in the educational system and it will make changes in the children architecture.



Problem of existing Estate's Kindergarten

Location:

- Located at the ground floor of the public housing. Teaching activities always disturb by the resident of the building.
- Share the main pathway with the resident. The result will decrease the security of the kindergarten.
- Share the entrance lobby with the building.

Garden/Playground and Outdoor activities area:

- No garden, playground and courtyard. It will limit the chance of children to learn from natural environment and physical development though exercise.
- Lack of outdoor activities area to allow children learn from the natural environment.

Classroom:

Fixed classroom is not fit for elastic education method. It also limits the chance for the children to learn social life.

Arrangement of the space:

The existing building structure is not for kindergarten purpose and it is difficult to arrange the use of space.

Sky lighting:

The existing building structure limited the chance of sky lighting opening.

Natural Ventilation:

The natural ventilation is poor at all kind of typical estates' kindergartens. To provide a good natural ventilation system can advantage children's health

Material Used:

The materials can create the atmosphere. Incorrect materials used in the building can be dangerous to the children. A carpet floor is much safer than the tiled floor for the children if the fall. A wall is the best place for the children to display their working material.

Selection of site

A good school location should locate nearby the children's home for convenience and safety reason. Generally school location are situated in sub-urban area, distance away from city centre or highway to prevent noise pollution. It is best to have a place in which the school children could have a closer relationship with the natural environment for them to realize the natural surroundings. Exploring the nature can build a good sense of humanity within them. Nearby green belt area should be suitable to locate such idea of school, it shouldn't be extremely faraway from urban area which give problems to accessibility. An area which covered good network of traffic is an ideal place to learning centre.

This project is focusing on the pre-school education at new town and Tseung Kwan O is one of the suitable cases and had been selected to achieve the finding of the research.

Tseung Kwan O had been developed in different area according to the Mass Transport Railway. And it could be developed into 4 regions.

According to the research, the selective of the site has several criteria. Each of the regions could find a suitable place to improve the pre school education environment.

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TSEUNG KWAN O



PO LAM



TIU KENG LENG



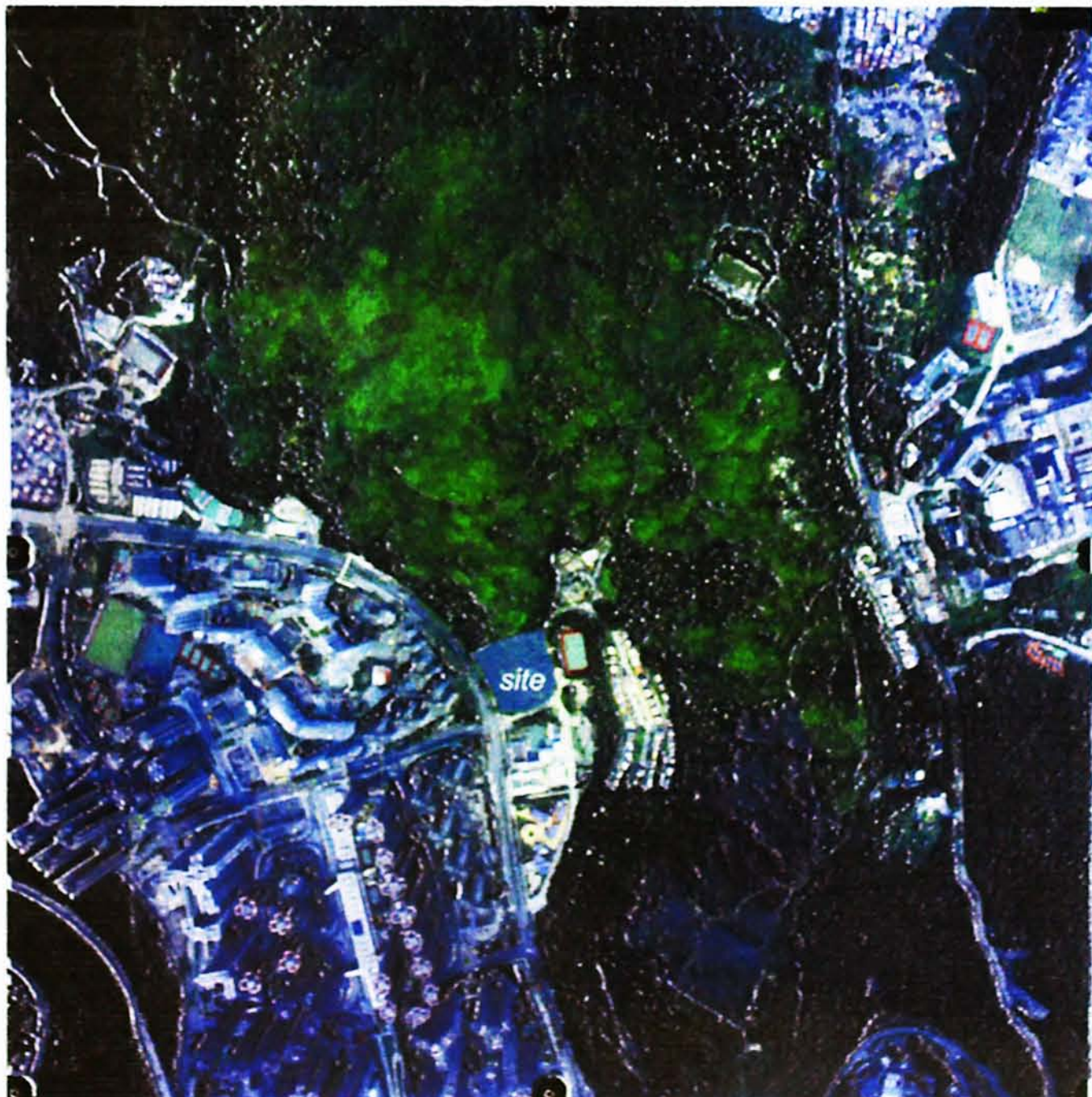
HANG HAU



The site is located near Po Lam Estate. It is located in a suburban area, close to town centre but not far away from main traffic junction and MTR station.

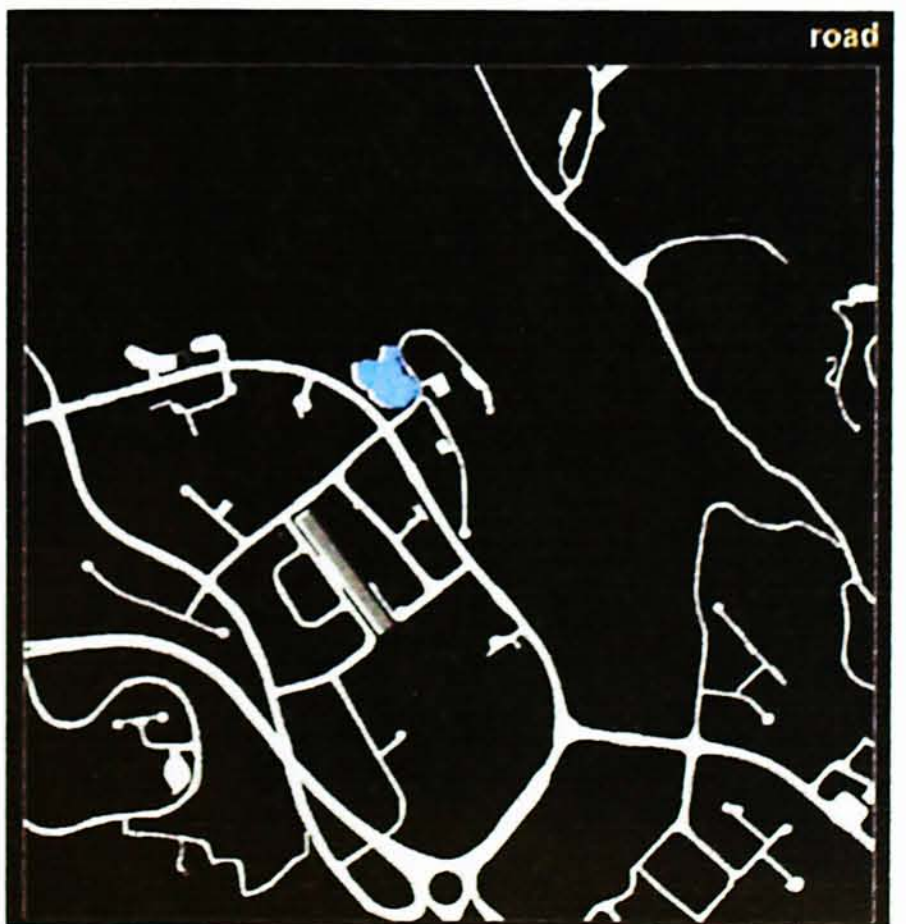
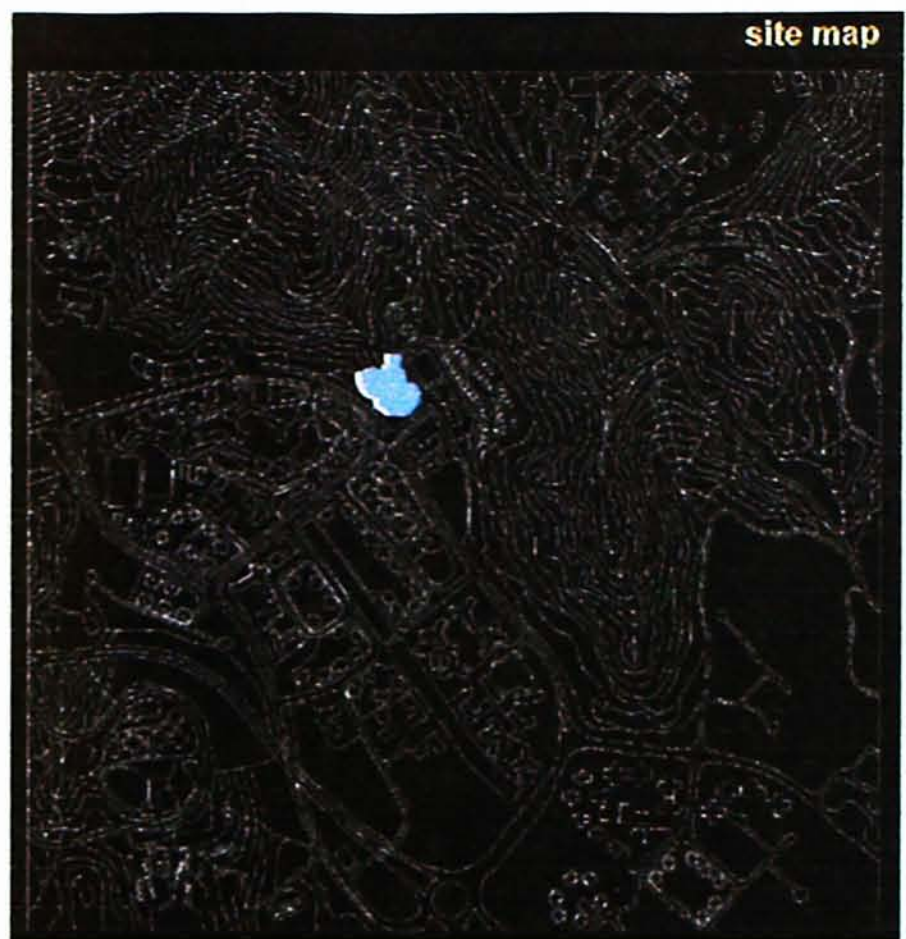
Po Lam Estate is a high population density typical public housing estate but there is a large green area and hill just beside it and separate from a road.

The site is located in a separate natural environment and it is the suburban area for the district.



Po Lam Estate is a high population density typical public housing estate but there are a large green area and hill just beside of it and separate from a road.

The site is located at the separate natural environment and it is the sub urban area for the district.



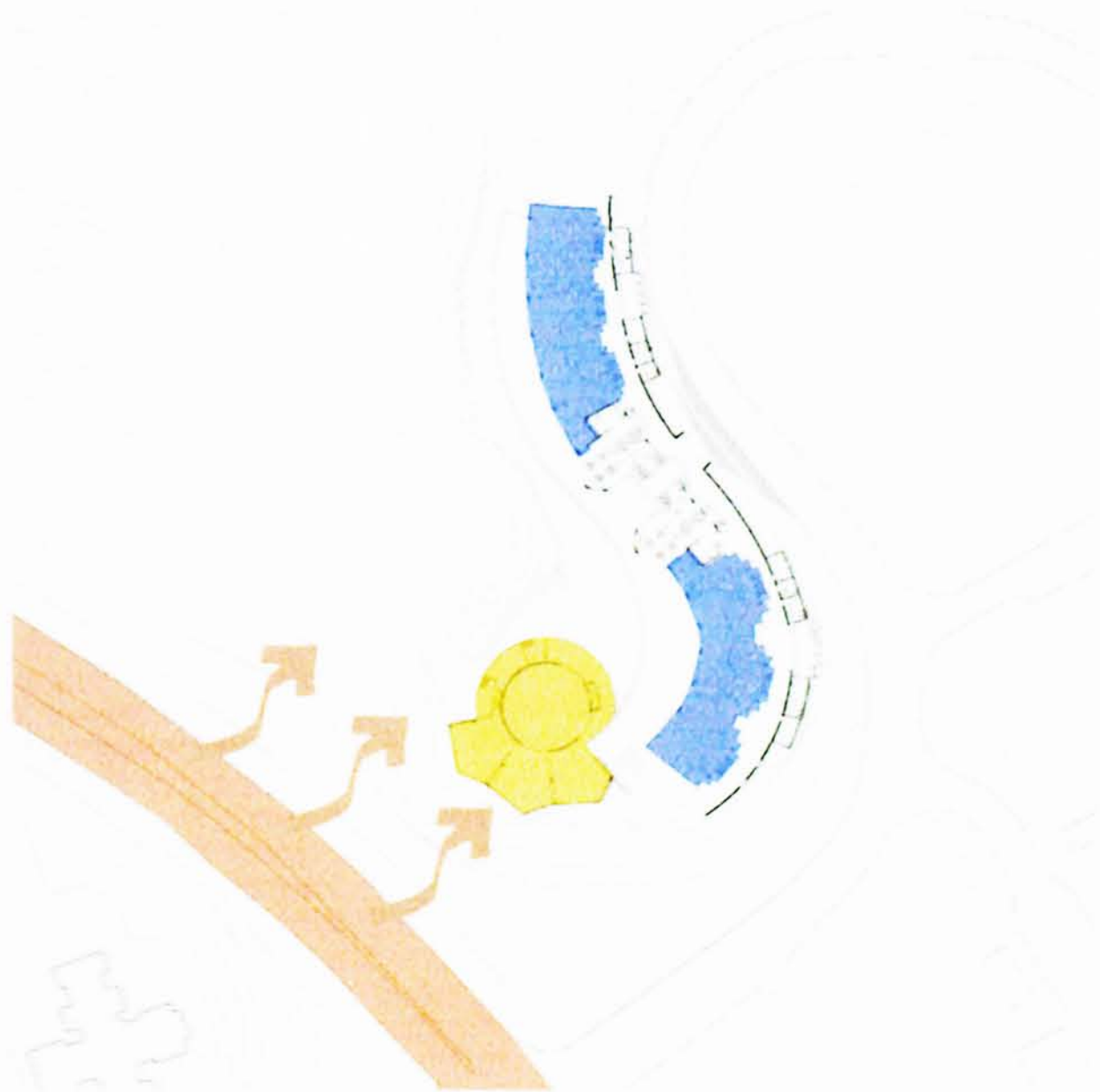
The site located at sub-urban area and it takes 5 minutes to go to the MTR station and main traffic conjunction and it just as same as the existing kindergarten at Po Lam Estate.

The site also located closed to the residential area and town centre.



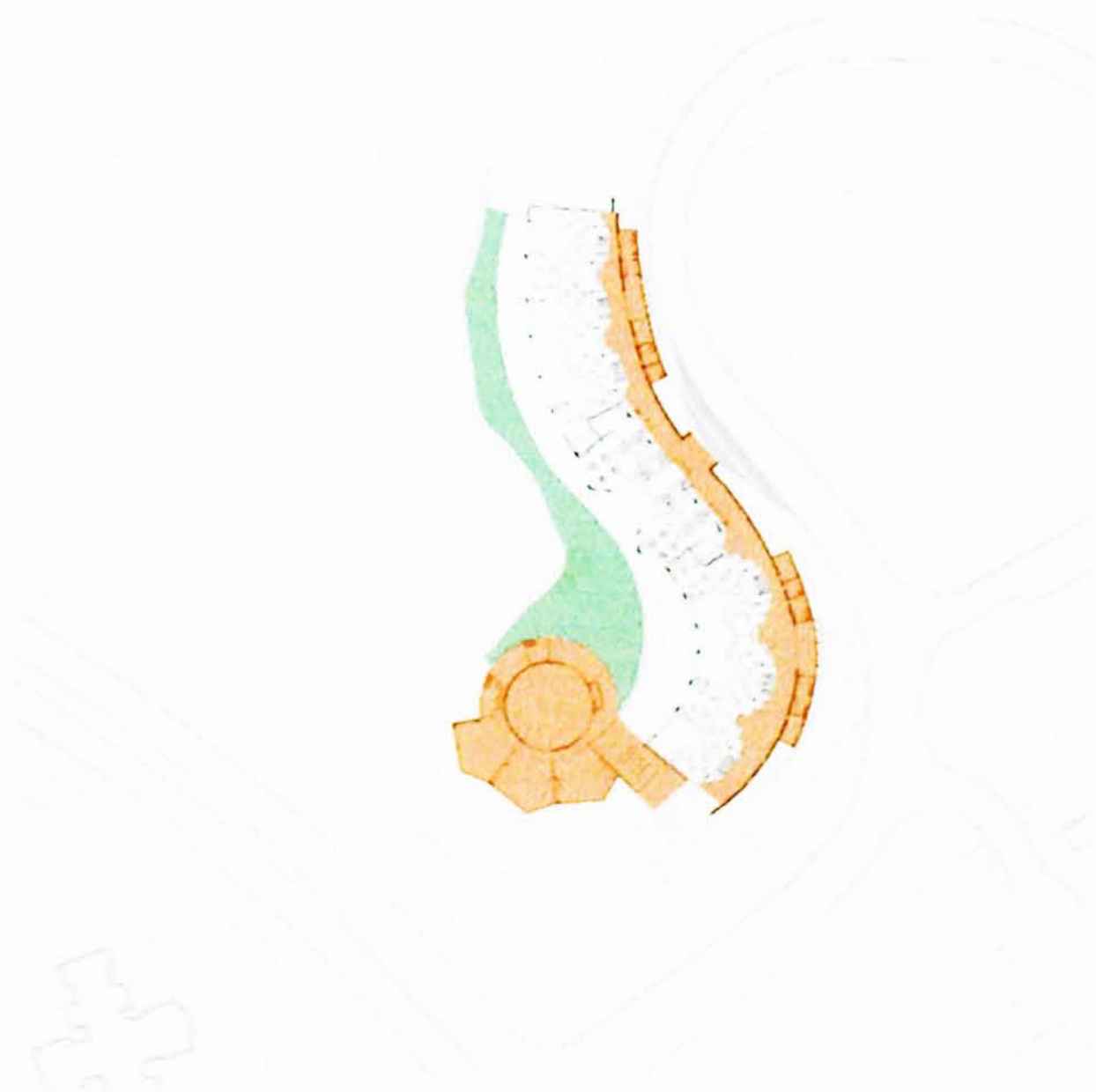
Noise Control

The noise sensitive area such as classroom, reading room, are located away from the main source of the noise and main road. Also the sport hall and the multi-function act as the noise buffer.



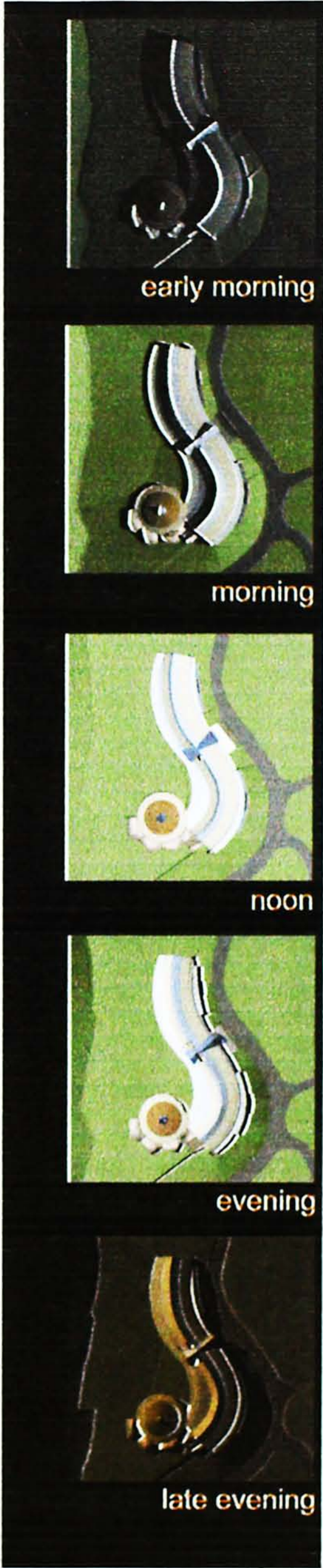
Protected Courtyard

The building has been designed in U shape along with the valley to create the courtyard and playground. The courtyard surround by the building can provide security environment for the children. The enclosure area which surround by the school can more close to the nature.



Sun Path Study

The shadow of the building shaded the courtyard at the morning which the skylight coming from the east and the shadow of the hill shade the courtyard at the evening.



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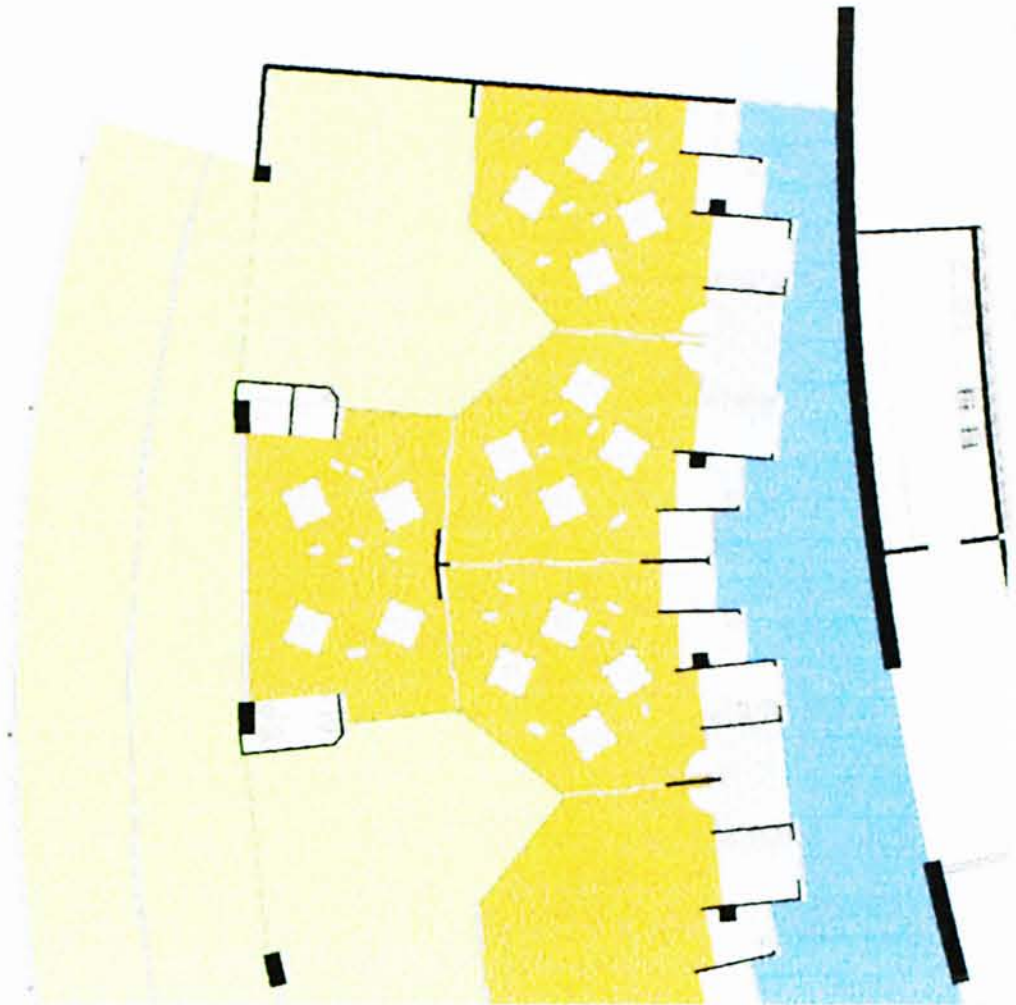


Flexibility Study

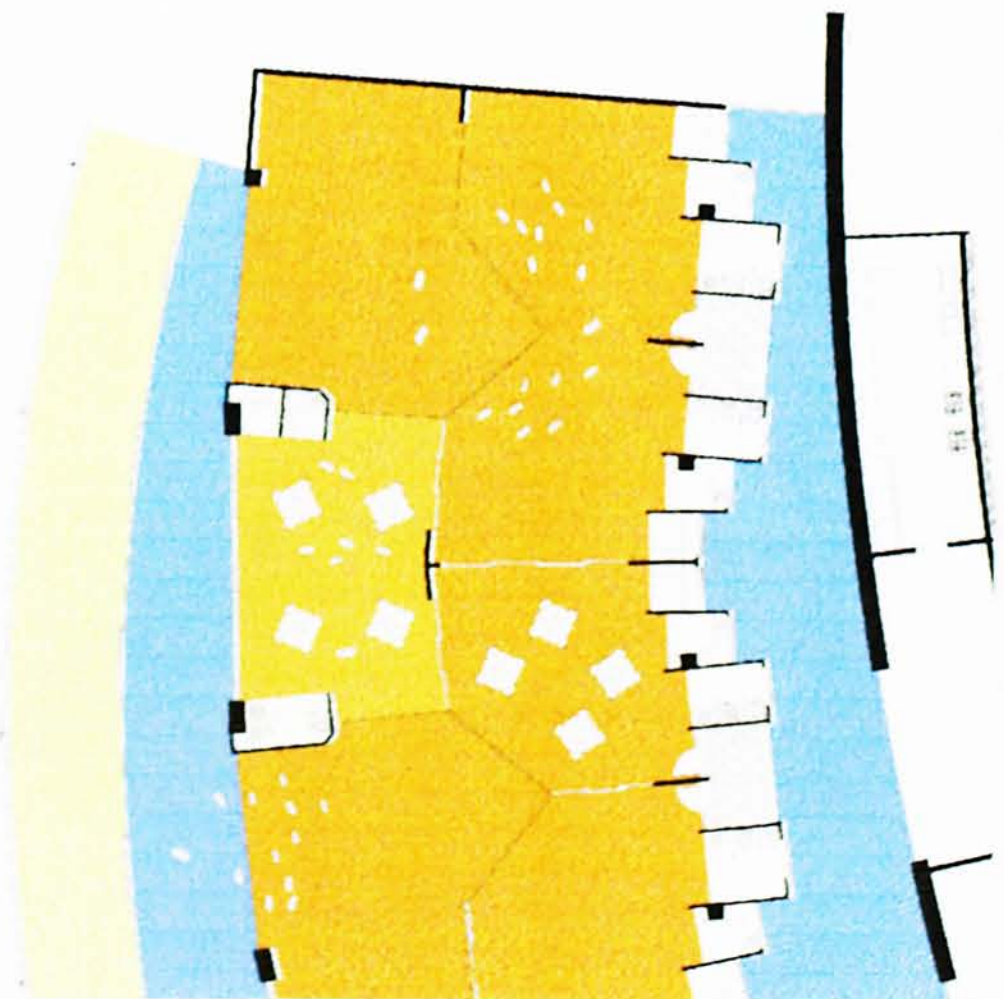
situation a

There are several situation of the arrangement of the classroom. The flexibility of the classroom allows different teaching activities and the changeable education planning.

The classrooms could be group from 2 to 4 classrooms and it also can extend the area to the activities corridor and outdoor garden.

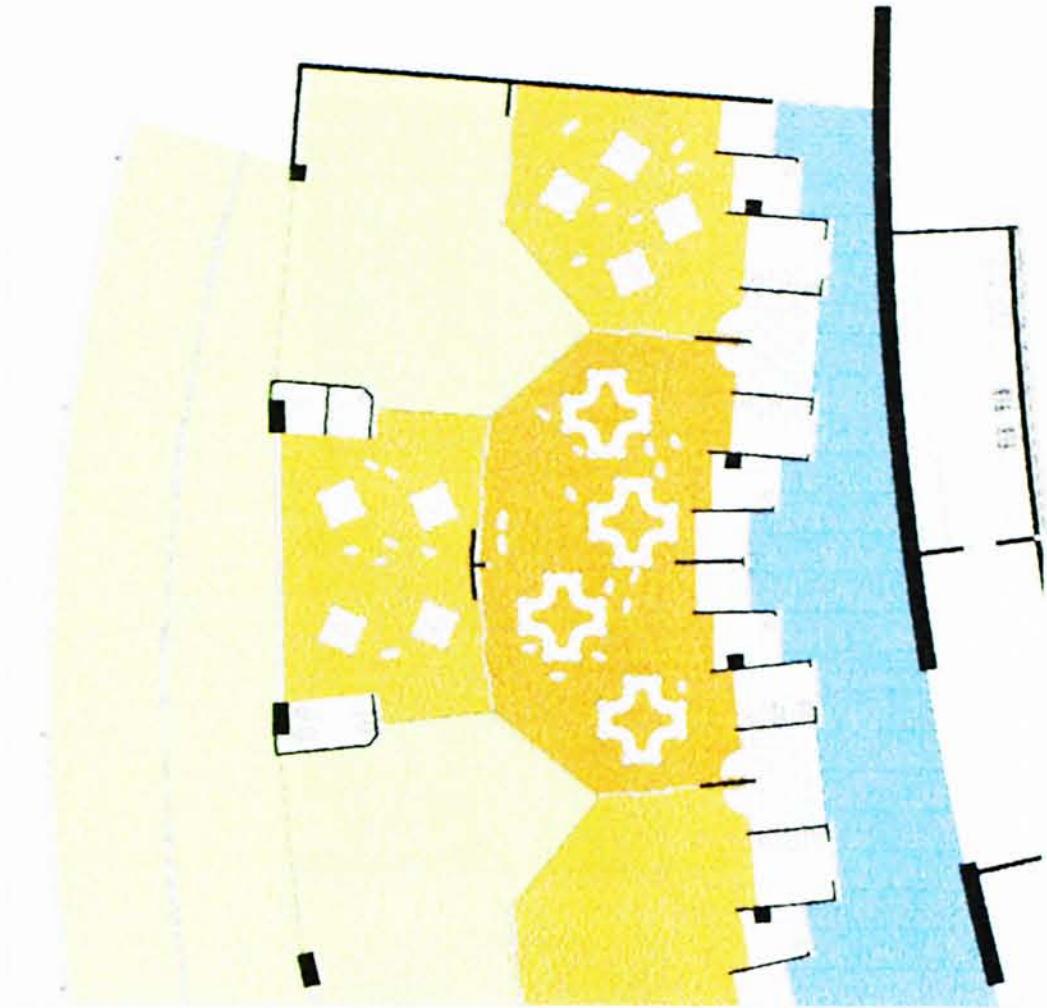


situation b



The classrooms could be group from 2 to 4 classrooms and it also can extend the area to the activities corridor and outdoor garden.

situation c



situation d

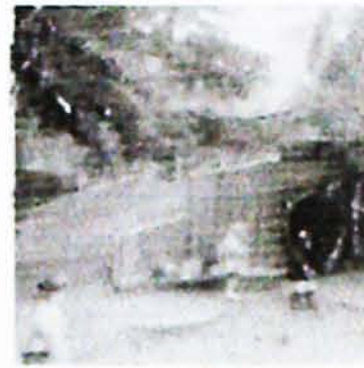


Adventure Pathway

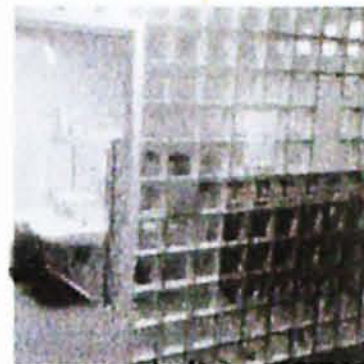
Change the School to Playground

Kindergarten is the place for the childhood adventure and exploration. Children can learn through different activities with the kindergarten life.

The school has been designed like a playground to let children explore themselves through the proposed adventure pathway. It also can make the school attractive to the children. It also can be benefit to them.



a - slop



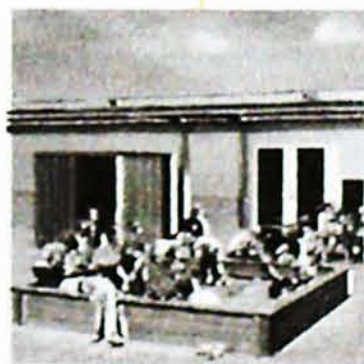
b - glassblock wall



c - hidden place



d - drawing wall

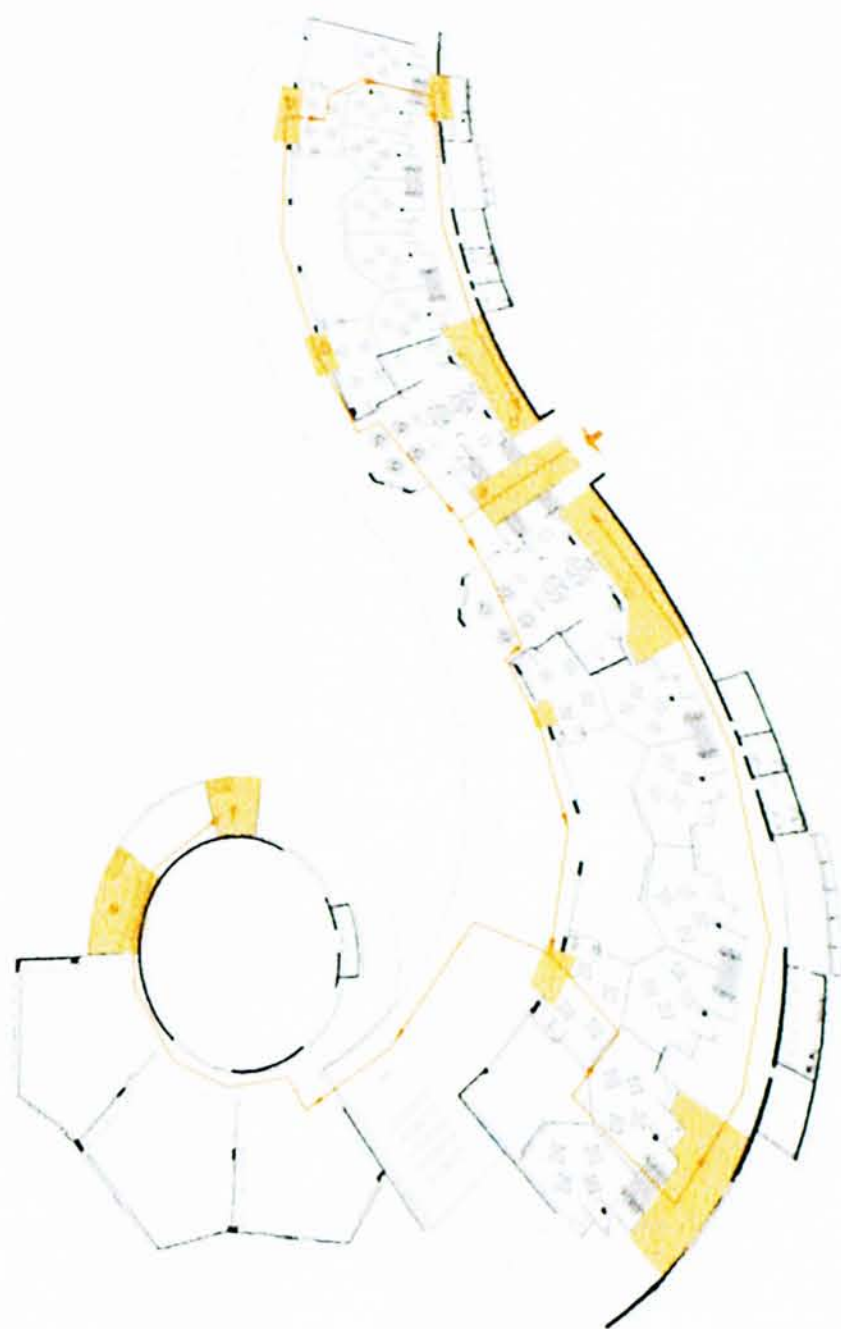


e - sand play



f - water play

Children can learn and train through exercise, exploration, touching, smelling, observation and communication with other childhood during the activities take place at the pathway.



Colour and Materials

The used of the material has been selected to protect the children.

The selected floor pattern:

Carpet

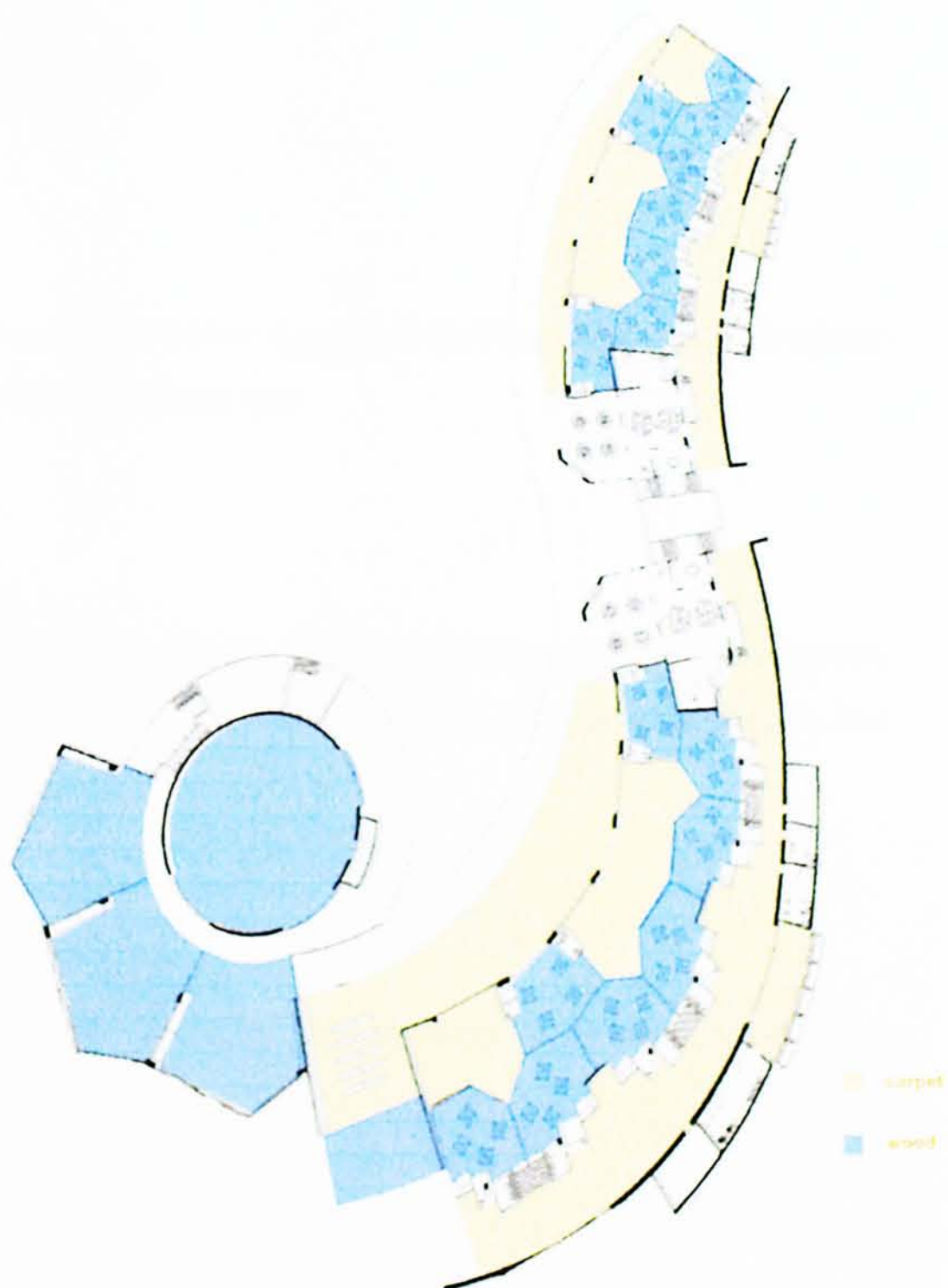
The used of carpet is to protect the children not to hurt from falling on the floor. Also it can reduce the noise when children running and stepping.

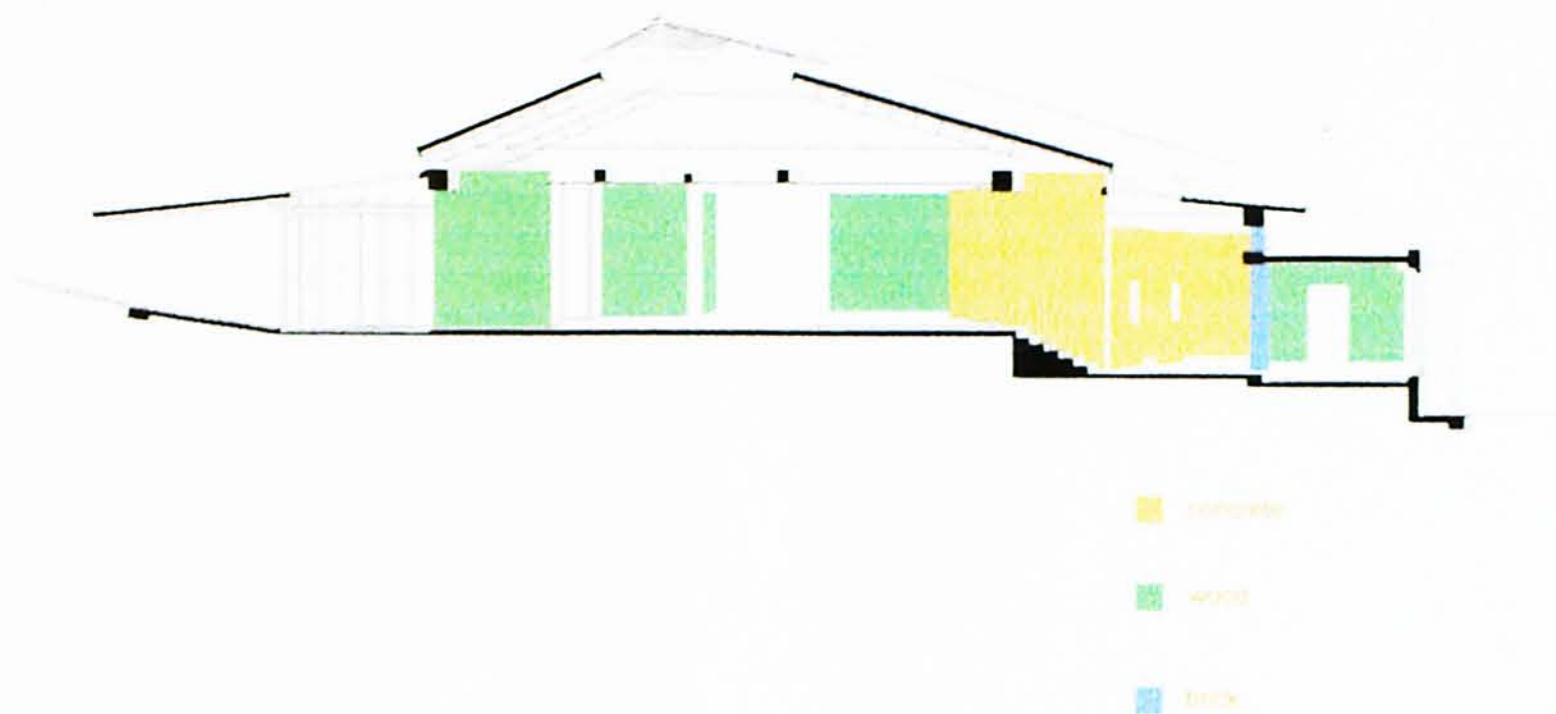
The selected colour of the carpet is tried to attract the children. Blue will give them a inspiring feeling of effortless movement. Green will give them a natural, soft and relaxing feeling.

Wood

The used of wood floor is try to give the children a natural feeling. Also, wood pattern is one of the material can easy for maintenance.

The selected colour of the wood is trend light and tried to provide a soft and warm feeling of the children.





The selected wall and partition material:

Wood wall and partition

The used of wood is tried to give the children a natural feeling. Also, wood pattern is one of the material can easy for maintenance.

Concrete Wall

The used of concrete wall is tried to give more texture feeling of the kindergarten. There are different colour paintings on the wall to create different feeling to the children.

Brick

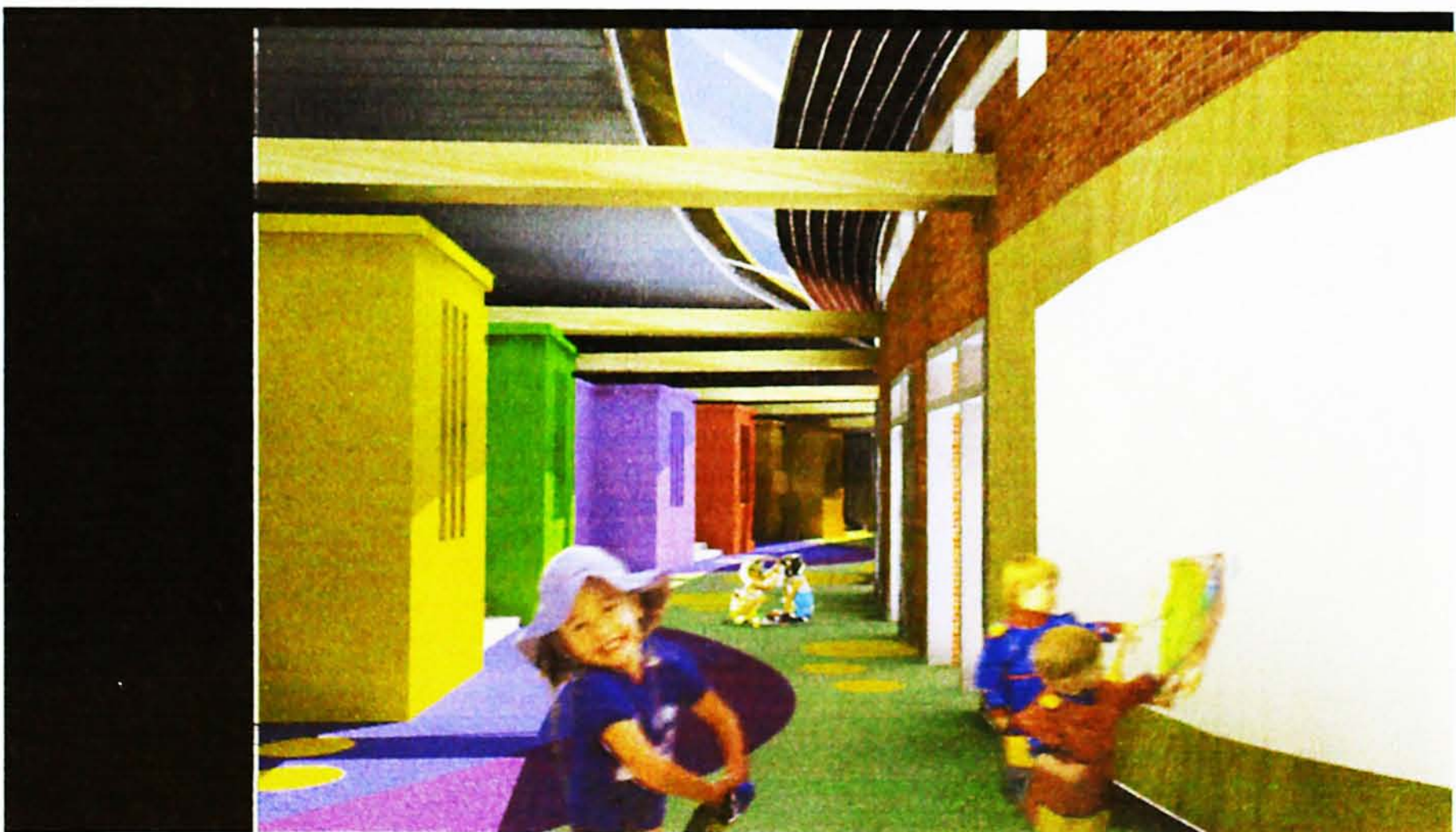
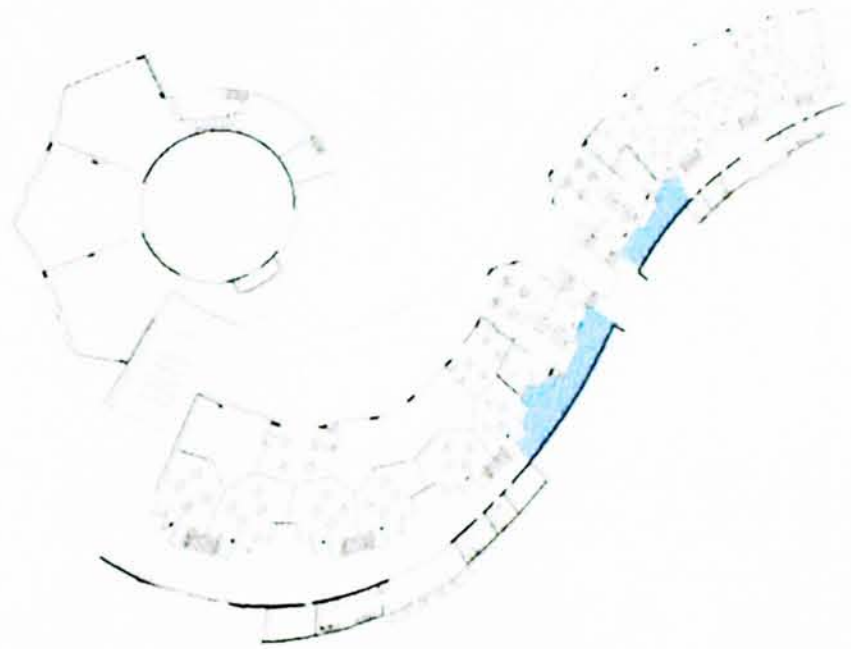
There are red brick exterior wall. It tried to provide a identification and characteristic of the kindergarten.

Having access to everything in the classroom may feel overwhelming to a child. So it can offer a structure to the day which provides a predictable routine within which the child can feel secure and there is a hidden place at the kindergarten.



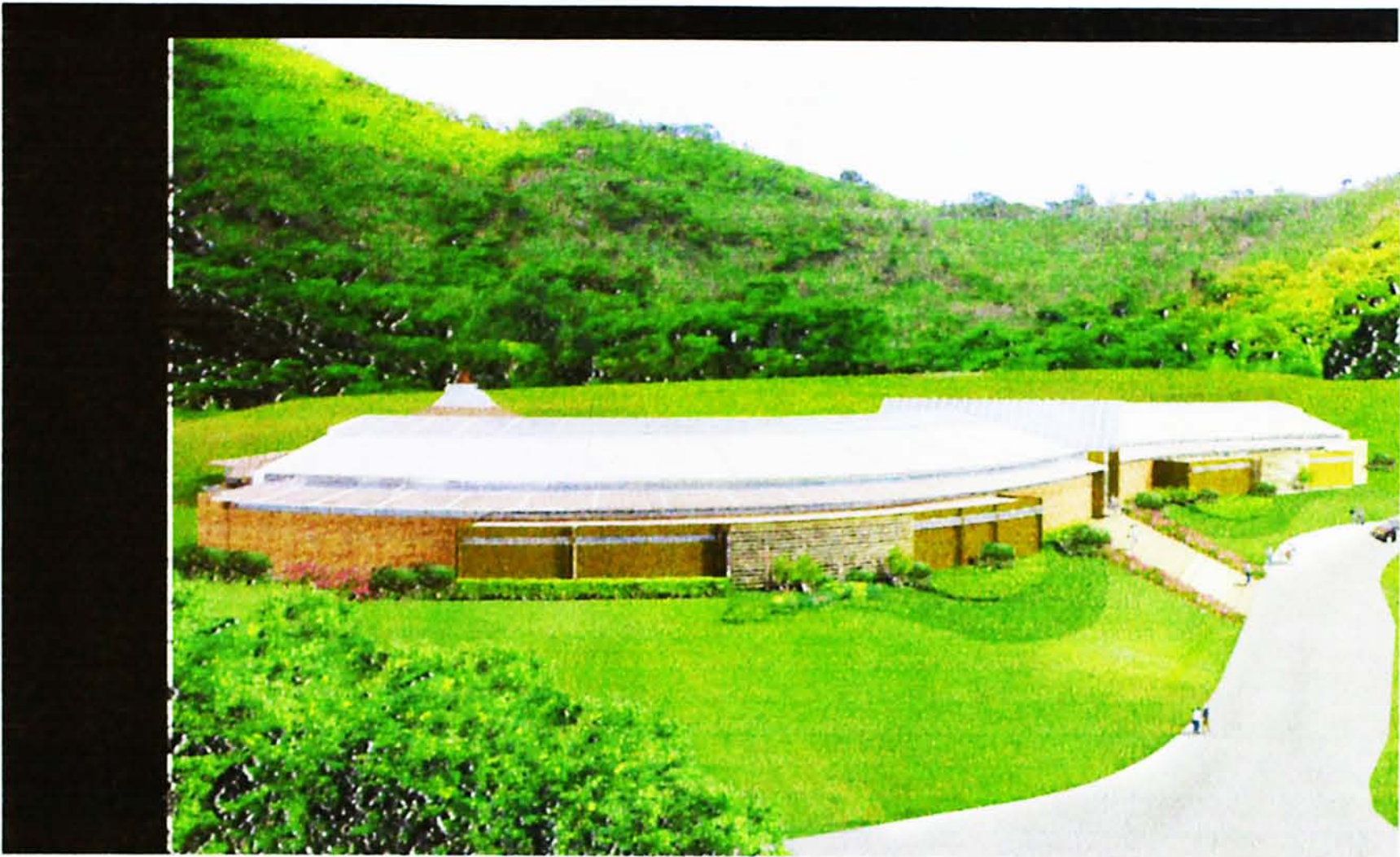
Children can explore themselves through drawing.

The drawing wall has been introduced to let the children drawing on the wall to do something cannot do at normal.



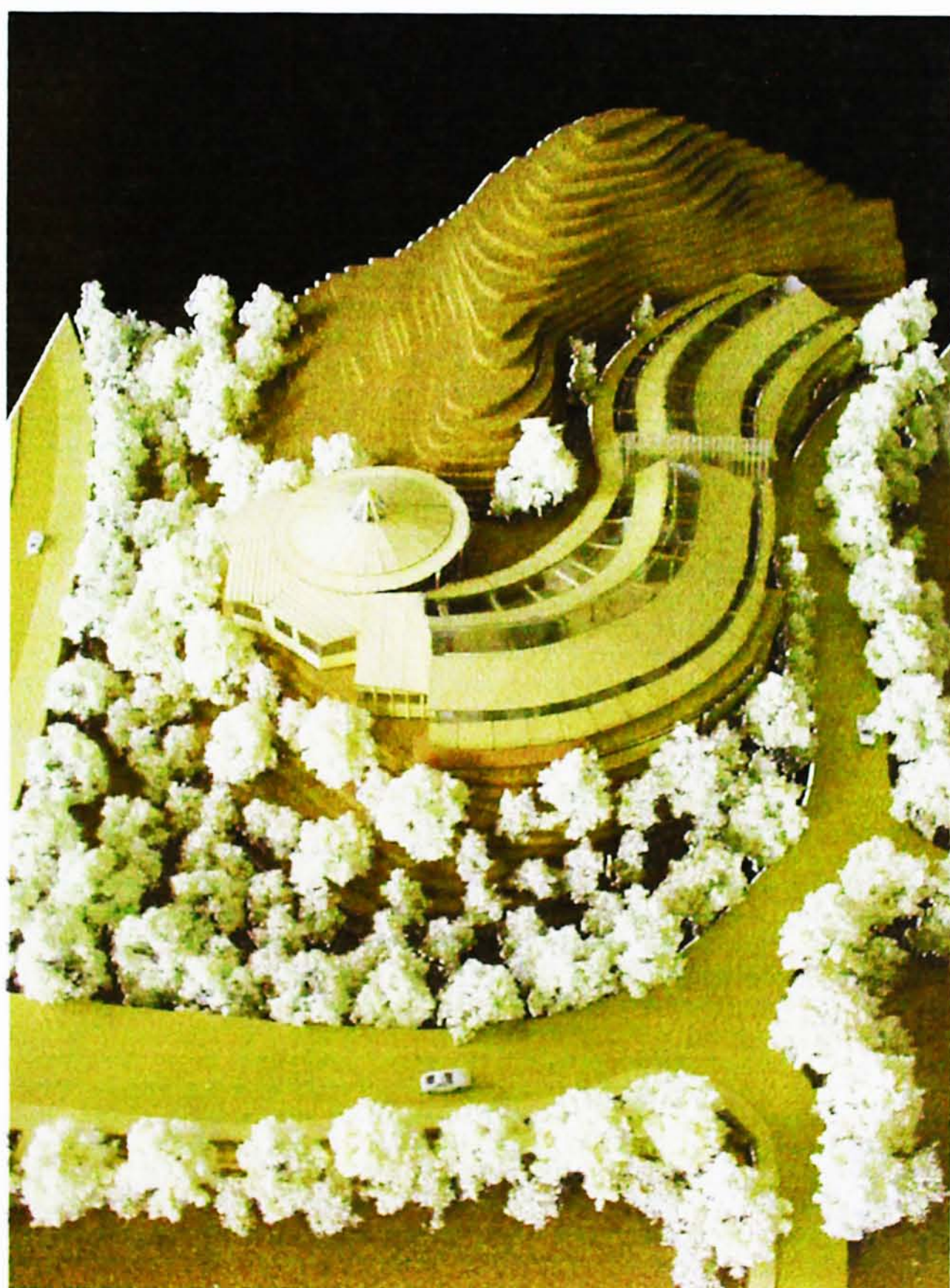
Rendered Perspective

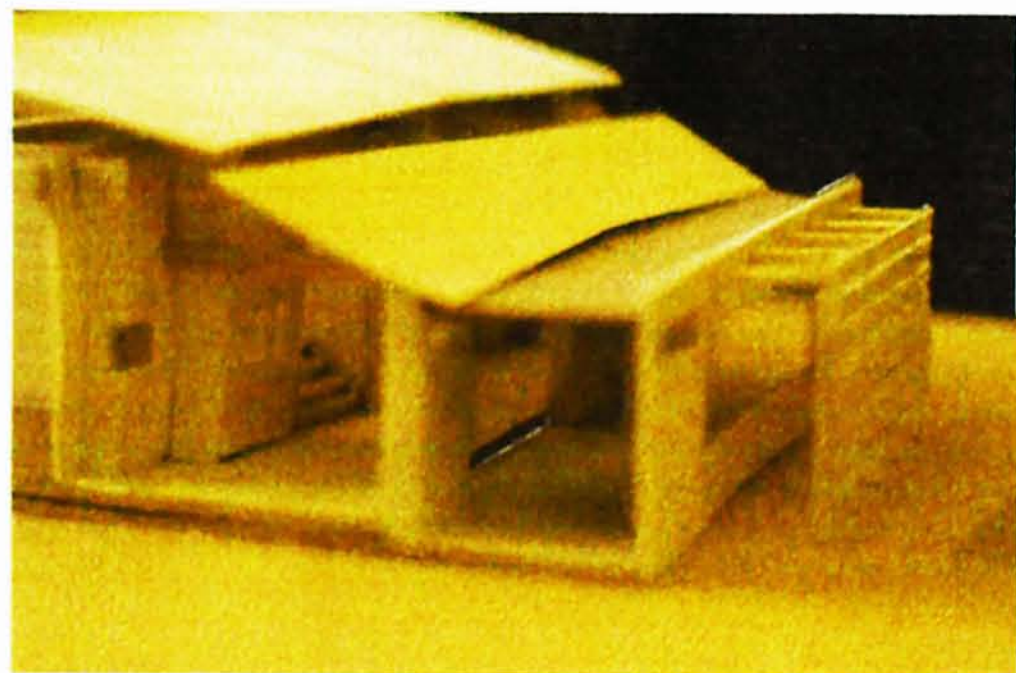
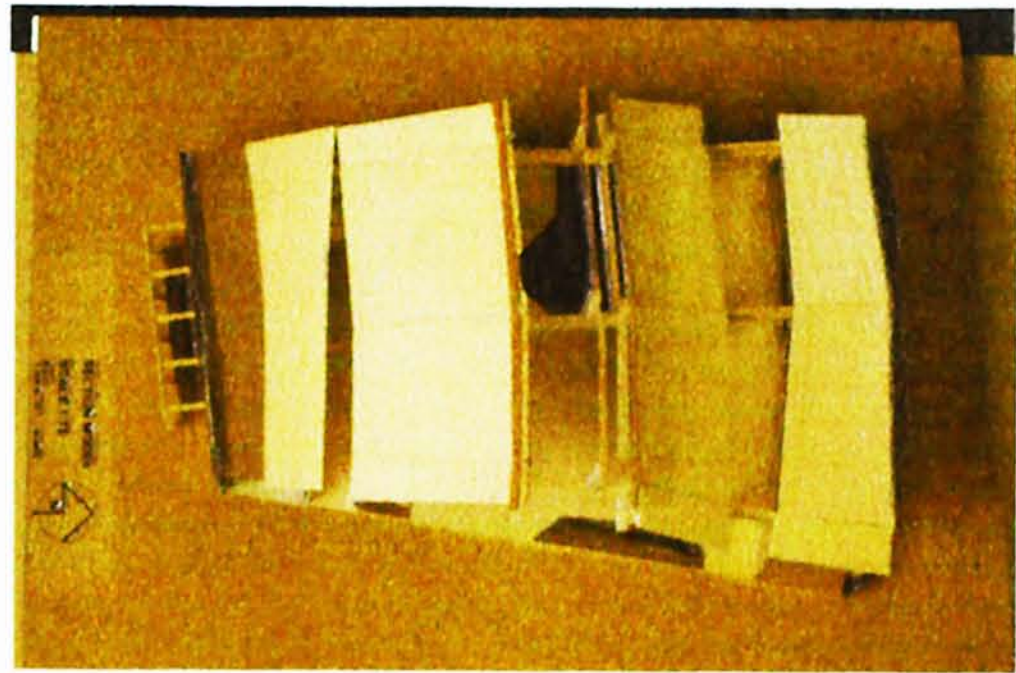
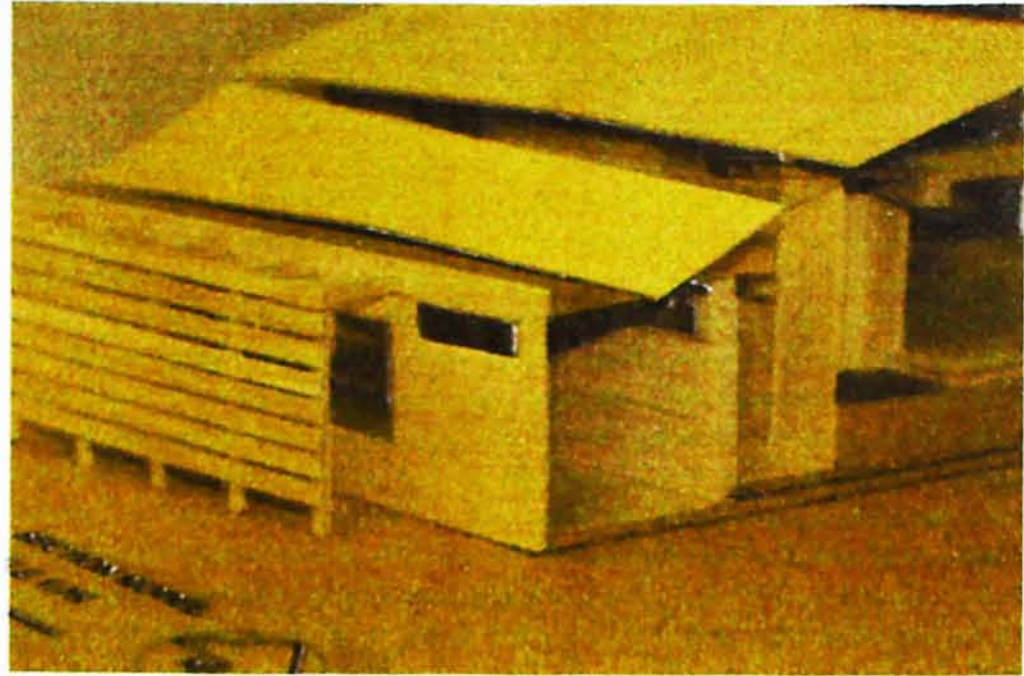




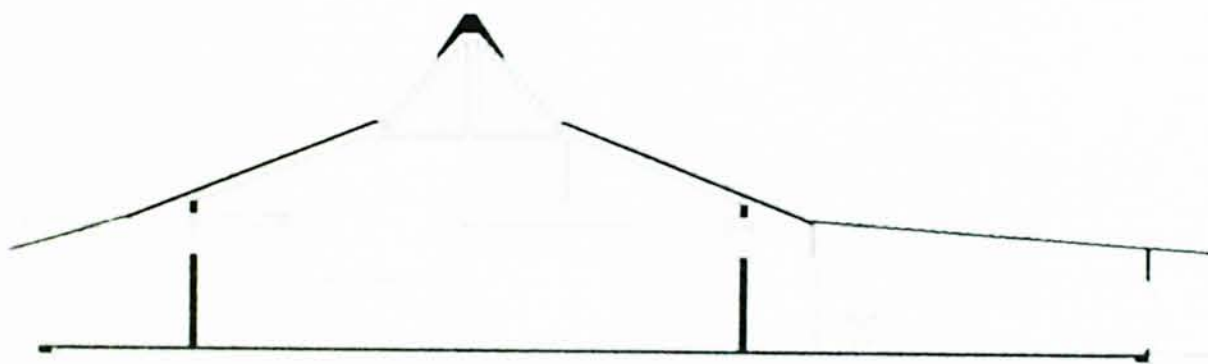
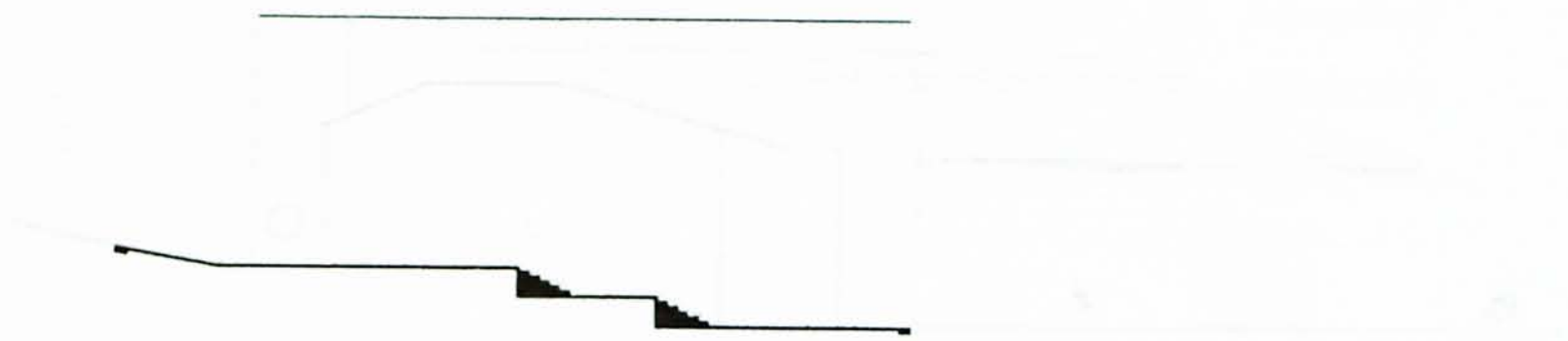
Model Photo











Reference

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